DETAILED ACTION

Response to Amendment

The amendment filed on 3/07/2011 has been received and claims 1-3, 6, 9-19 and 36 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/28/2011 has been entered.

Claim Objections

2. Claims 1-3, 6, 9-19 and 36 are objected to because of the following informalities:

- in Claim 1 line 7, insert "the" in between "a flow of" and "gaseous sterilizing agent"; and
- in Claim 1 line 18, insert "the" in between "the flow of" and "gaseous sterilizing agent".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3, 6, 9-19 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, it is not clear as to whether and how the control 30 and the flow meter as discussed in the first paragraph on p. 14 of Specification are the means used to control a flow of the gaseous sterilizing agent at such rate that the higher positive pressure is maintained in the sterilization zone when the gaseous sterilizing agent is both introduced into and evacuated from the sterilization zone since these components were described instead for determining whether the flow rate of air into the gas production generating unit is too low or too high.

In addition, the limitation of "means for controlling a flow of gaseous sterilizing agent in the sterilization zone...at such rate that the higher positive pressure is maintained in the sterilization zone" appears to conflict with further limitation on the means for controlling where "the means for controlling the flow of gaseous sterilizing agent are arranged to introduce the gaseous sterilizing agent in a top portion of the sterilization zone and to evacuate the gaseous sterilizing agent in a bottom portion of the sterilization zone" since the Specification discloses distinctly different structures for the same means, where it is not clear how the structure for introducing the sterilizing agent from a top portion and evacuating the sterilizing agent from a bottom portion is

related to and further limiting a means that maintains the sterilization flow rate that a higher positive pressure is maintained in the sterilization zone. Specifically, the Specification in p. 14 lines 3-15 appears to indicate that control unit 30 and a flow meter are the means for controlling the flow rate of the gaseous sterilizing agent whereas the Specification appears to indicate in p. 9 lines 31-39 indicates the nozzles 17 and outlets 20 are the means for controlling that "the flow of gaseous agent are arranged to introduce the gaseous sterilizing agent in a top portion of the sterilization zone and to evacuate the gaseous sterilizing agent in a bottom portion of the sterilization zone"

5. The following is a quotation of the fourth paragraph of 35 U.S.C. 112:

> Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

6. Claim 36 is rejected under 35 U.S.C. 112, fourth paragraph, as failing to specify a further limitation of the subject matter claimed.

Specifically, the limitation of Claim 36 appears to repeat a limitation of Claim 1 in lines 13-14 and is not further limiting the claim structurally.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-3, 6, 16, 18-19 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson (5258162) in view of Zelina (20020159915), Schroeder (6328928) and Taggart (6475435).

As to Claims 1, 3, 6, 16 and 36, Andersson ('162) discloses a device (1) for sterilization in production of packages (3) (see entire document, particularly Col. 2 lines 7-21, Col. 3 lines 38-43) having packages (3) having an open end and a closed end (see Col. 2 lines 8-9, Col. 4 lines 12-16) prior to filling the packages (3), which is adapted for sterilization with a gaseous sterilizing agent in the form of gaseous hydrogen peroxide (see Col. 3 lines 32-33 and 45-47, Col. 4 lines 5-8, Col. 5 lines 7-8) kept in the gaseous phase throughout the sterilization process (see Col. 2 lines 7-28), said device (1) comprising a heating zone (27), a sterilization zone (28) which also acts as a venting zone (see Col. 5 lines 38-57), a filling zone (29) and means (25, 35) for controlling a flow of gaseous sterilizing agent in the sterilization zone (28) such that the gaseous sterilizing agent is both introduced into (via 25) and evacuated (via 35) from the sterilization zone (28).

Andersson ('162) does not appear to specifically teach that the device is comprised of a separate venting zone, or that means (25, 35) is for maintaining a higher positive pressure in the sterilization zone than in the heating zone and the separate venting zone, or that the means for controlling the flow of gaseous sterilizing agent in the sterilization controls the flow to such a rate that the higher positive pressure is maintained in the sterilization zone.

As to the limitations that the device is comprised of a separate venting zone comprised of means for venting away the sterilizing agent used in the sterilization zone from the packages after sterilization, it was well known in the art at the time of invention to provide a separate venting zone in a device for sterilization in production of packages. Zelina ('915) exemplifies a device (see Figure 8) for sterilization in production of packages (120) with a gaseous sterilizing agent in the form of hydrogen peroxide (see p. 5 [0063]) comprising a heating zone (170), a sterilization zone (11) and a venting zone (182), wherein the venting zone (182) comprises means (183, 184, 188) for venting away the sterilizing agent used in the sterilization zone (11) from the packages (120) after sterilization (see entire document, particularly Figure 8 and p. 6 [0064]), in order to remove the gaseous sterilizing agent from the products (see p. 6 [0064]). It would have been obvious to one of ordinary skill in this art at the time of invention to provide a separate venting zone comprised of means for venting away the sterilizing agent used in the sterilization zone in the device of Andersson in order to remove the sterilizing agent from the products as exemplified by Zelina.

As to the limitation that means for maintaining a higher positive pressure in the sterilization zone than in the surrounding zones, it was well known in the art at the time of invention to provide means for maintaining a higher positive pressure in a sterilization zone in which sterilization is performed. Schroeder ('928) exemplifies a device (see Figure 2) for sterilization (via 18 in 17b) in production of packages (11) (see entire document, particularly Abstract) having an open end and a closed end (see Figures 2-5 and 7) prior to filling (via 28), which is adapted for sterilization with a gaseous sterilizing agent in the form of hydrogen peroxide (see Col. 3 lines 16-22) and adapted to sterilize itself internally (see Col. 4 lines 15-16 and 31-36), said device comprising a heating zone (in 17a via 16), a sterilization zone (17b) and means (23, 35, 36) for maintaining a higher positive pressure is maintained in the sterilization zone (17b, 20) than in adjacent zone such as the heating zone (17a) and a sealing region (17c) (see Col. 3 lines 5-10 and Col. 4 lines 16-20), in order to prevent the entry of germ-laden air into the sterilization zone (see Col. 3 line 10).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide means for maintaining a higher positive pressure in the sterilization zone in which the sterilization is performed than in the adjacent/surrounding zones in the device of Andersson as modified by Zelina in order to prevent non-sterile air from entering the sterilization zone as exemplified by Schroeder.

As to the limitation that the means for controlling the flow of gaseous sterilizing agent in the sterilization zone controls the flow to such a rate that a higher positive

pressure is maintained in the sterilization zone, it was known in the art at the time of invention to provide means for controlling a flow of a gaseous sterilizing agent in the sterilization controls the flow to such a rate that the higher positive pressure is maintained in the sterilization zone in a device for sterilizing packages.

Taggart ('435) discloses a device (10) for sterilization in production of packages (12), which is adapted for sterilization with a gaseous sterilizing agent kept in the gaseous phase throughout the sterilization process (see entire document, particularly Abstract, Col. 6 lines 28-48, Col. 8 lines 35-37, and Cols. 9-10) and also adapted to sterilize itself internally (see Col. 16 lines 16-36), said device (10) comprising a heating zone (164), a sterilization zone (60, 165) and means (550 as well as various components such as flow sensors, pressure and temperatures sensors and related pumps, valves, etc. – intrinsically disclosed in the reference) for controlling flow of a gaseous agent in the sterilization zone (60, 165) such that the gaseous agent is introduced into the sterilization zone (60, 165) at a rate that the higher positive pressure is maintained in the sterilization zone (60, 165) (see Col. 5 lines 16-18, Col. 6 lines 54-65, Col. 7 lines 1-8 and Col. 14 line 43 to Col. 16 line 15, specifically Col. 15 lines 43-48),

wherein the heating zone (164) comprises means for heating the packages to a temperature above a dew point of the sterilizing agent used in the sterilization zone (see entire document, particularly Col. 10 lines 3-7) such that packages (12) are heated by means for introducing (via 148, 150, 152) and withdrawing (via 153) hot sterile air in the heating zone (164) (see Figures 3 and 15 and Col. 10 lines 3-7, 12-15 and 32-45),

in order to provide a highly sterile zone to ensure that no contaminant will enter during the package (12) assembling/filling process (see Col. 9 lines 39-41) and to heat the packages so as to activate and dry sterilant from the packages (see Col. 10 lines 32-45).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide a means for controlling a flow of gaseous agent to maintain the higher positive pressure in the sterilization zone and to provide means for introducing and withdrawing hot sterile air in the heating zone in the device of Andersson as modified by Zelina and Schroeder in order to ensure that no contaminant will be present in the heating and sterilization zones as well as to activate/dry sterilant on the packages as shown by Taggart.

As to Claim 2, while Andersson ('162) discloses that the zones (27-29) are separated from each other by means of partitionings (see Figures 1-3) where packages (3) are passed from zone to zone, for example from the heating zone (27) into the sterilization zone (28) (see Figures 1-3, Col. 4 lines 57-58), Andersson ('162) does not appear to specifically teach that the packages are passed through openings in partitionings.

However, it would have been obvious and well within the purview of one of ordinary skill in this art at the time of invention that separate/discrete chambers/zones would be comprised of an opening in each partitioning in order to allow the packages (3)

to pass from one discrete zone into the next discrete zone. Only the expected results would be attained.

Moreover, it was well known in the art at the time of invention to provide an opening in a partitioning separating a heating zone and a sterilization zone into the sterilization zone. Schroeder ('928) exemplified that the packages (11) are passed through openings (19, 22) in partitionings (see Figures 2 and 4, Col. 3 lines 5-10), separating for example a heating zone (16, 17a) and the sterilization zone (20, 17b) into the sterilization zone (20, 17b) (see Figure 2), where they are subjected to the gaseous sterilizing agent (see Col. 3 lines 16-22), in order to allow the packages to pass through to the next zone (see Col. 3 lines 4-6).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide openings in the partitionings in the device of Andersson in order to allow packages to pass through from one zone to the next as exemplified by Schroeder.

As to Claim 18, Andersson ('162) discloses that the device (1) comprises a unit (17) for production of the gaseous sterilizing agent (see Col. 5 lines 20-35).

Zelina ('915) also discloses that the device is comprised of a unit (10) for production of the gaseous sterilizing agent (see Figure 8, pp. 2-3 [0035], p. 3 [0036] and p. 5 [0060]).

As to Claim 19, While Zelina ('915) discloses that the device is further comprised of a filling zone (190) (see Figure 8), neither Andersson ('162), Zelina ('915) nor

Schroeder ('928), appears to specifically teach that the filling zone is comprised of means for maintaining a higher pressure in the filling zone than in the venting zone.

It was well known in the art at the time of invention to provide a higher pressure in the filling zone of a bottling device that also employees sterilization zone. Taggart ('435) discloses that the device (10) is comprised of a filling zone (166) and means (140, 142, 144) for maintaining a higher pressure in the filling zone (166) than in the other adjacent zones (164, 172; where these adjacent zones are deemed venting zones) (see Col. 9 lines 39-46) in order to prevent unwanted high levels of sterilant to enter the product that is being filled into the packages during the filling process (see Col. 9 lines 44-50, Col. 9 line 63 to Col. 10 line 1) and to ensure that no contaminants enter the sterilization tunnel (90)/zone (see Col. 9 lines 44-50, Col. 10 lines 18-20 and 28-31).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide means for maintaining a higher pressure in the filling zone than the venting zone in the device of Andersson as modified by Zelina and Schroeder in order to ensure that no contaminant, including sterilant, enters the product and the sterilized packages during the filling process as shown by Taggart.

Thus, Claims 1-3, 6, 16, 18-19 and 36 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Andersson ('162), Zelina ('915), Schroeder ('928) and Taggart ('435).

10. Claims 1-3, 6, 9-10, 12-18 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zelina (20020159915) in view of Taggart (6475435) and Foti (4992247).

As to Claims 1, 3 and 36, Zelina ('915) discloses a device for sterilization in production of packages (120), having an open end (123, 134) and a closed end (132) (see entire document, particularly Figures 1 and 8), prior to filling the packages (120) (wherein filling occurs in 190; see entire document, particularly Figure 8), which is adapted for sterilization with a gaseous sterilizing agent in the form of gaseous hydrogen peroxide (see entire document, particularly Abstract) kept in the gaseous phase throughout the sterilization process (see entire document, particularly p.5 [0061]), said device comprising a heating zone (170), a sterilization zone (11), a venting zone (182), and means (126, 128, 172, 174, 176, 178, 180) for controlling a flow of gaseous sterilizing agent in the sterilization zone (11) such that the gaseous sterilizing agent is both introduced into and evacuated from the sterilization zone (11) (see Figure 8), wherein the heating zone comprises means (171) for heating the packages (120) to a temperature above a dew point of the sterilizing agent used in the sterilization zone (11) (see entire document, particularly Figure 8 and p. 5 [0062]);

wherein, in the sterilization zone (11), the gaseous sterilizing agent flows essentially in a direction from the open end (123, 134) of the packages (120) (via 172) towards the closed end (132) of the packages (120) (see entire document, particularly Figure 8, p. 5 [0063] and p. 6 [0067]).

Zelina ('915) does not appear to specifically teach that the device for sterilization in production of packages is comprised of means for maintaining a higher positive pressure in the sterilization zone than in the heating zone and venting zone, or that the means for controlling the flow that provides/operates at such a rate that the higher positive pressure is maintained in the sterilization zone, or that the means for heating comprises means for introducing and withdrawing hot air in the heating zone, or that the means for controlling the flow of gaseous sterilizing agent are arranged to introduce the gaseous sterilizing agent in a top portion of the sterilization zone and to evacuate the gaseous sterilizing agent in a bottom portion of the sterilization zone, maintaining a flow of gaseous sterilizing agent essentially from top to bottom.

As to the limitations that that the device for sterilization in production of packages is comprised of means for maintaining a higher positive pressure in the sterilization zone than in the heating zone and venting zone, that the means for controlling a flow that provides/operates at such a rate that the higher positive pressure is maintained in the sterilization zone, and that the means for heating comprises means for introducing and withdrawing hot air in the heating zone, it was well known in the art at the time of invention to provide means for maintaining a higher positive pressure in the sterilization zone than in the heating zone and venting zone as well as to provide such a rate that the higher positive pressure is maintained in the sterilization zone via the means for controlling flow of gaseous agent in a sterilization device for packages and to provide

the means for heating comprises means for introducing and withdrawing hot air in the heating zone.

Taggart ('435) discloses a device (10) for sterilization in production of packages (12), which is adapted for sterilization with a gaseous sterilizing agent kept in the gaseous phase throughout the sterilization process (see entire document, particularly Abstract, Col. 8 lines 35-37, and Cols. 9-10), said device (10) comprising a heating zone (164), a sterilization zone (166), a venting zone (172), means (including 140, 142, 144) for maintaining a higher positive pressure in the sterilization zone (166) than in the heating zone (164) and venting zone (172) (see Col. 9 lines 42-46), and means (550 as well as various components such as flow sensors, pressure and temperatures sensors and related pumps, valves, etc. – intrinsically disclosed in the reference) for controlling flow of a gaseous agent in the sterilization zone (166) such that the gaseous agent is introduced into the sterilization zone (166) at a rate that the higher positive pressure is maintained in the sterilization zone (166) (see Col. 5 lines 16-18 and Col. 14 line 43 to Col. 16 line 15, specifically Col. 15 lines 34-36 and 43-48);

wherein the heating zone (164) comprises means (148, 150, 152, 153) for heating the packages to a temperature above a dew point of the sterilizing agent used in the sterilization zone (166) (see entire document, particularly Col. 10 lines 3-7);

wherein the means for heating (148, 150, 152, 153) comprises means for introducing (via 148, 150, 152) and withdrawing (via 153) hot sterile air in the heating zone (164) (see Figures 3 and 15 and Col. 10 lines 3-7, 12-15 and 32-45),

in order to provide a highly sterile zone to ensure that no contaminant will enter during the package (12) assembling/filling process (see Col. 9 lines 39-41) and to heat the packages so as to activate and dry sterilant from the packages (see Col. 10 lines 32-45).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide a means for maintaining a higher positive pressure in the sterilization zone than in the heating zone and venting zone as well as controlling means to provide a rate for the gaseous agent to maintain the higher positive pressure in the sterilization zone and to provide means for introducing and withdrawing hot sterile air in the heating zone in the device of Zelina in order to ensure that no contaminant will be present in the heating and sterilization zones as well as to activate/dry sterilant on the packages as shown by Taggart.

As to the limitation that the means for controlling the flow of gaseous sterilizing agent are arranged to introduce the gaseous sterilizing agent in a top portion of the sterilization zone and to evacuate the gaseous sterilizing agent in a bottom portion of the sterilization zone, maintaining a flow of gaseous sterilizing agent essentially from top to bottom, it was well known in the art at the time of invention that means for controlling a flow of a gaseous sterilizing agent in a device for sterilization in production of packages is arranged to introduce a gaseous sterilizing agent in a top portion of a sterilization zone and to evacuate the gaseous sterilizing agent in a bottom portion of the sterilization zone.

While Zelina ('915) does not appear to specifically teach in the embodiment shown in Figure 8 that the means for controlling the flow of gaseous sterilizing agent are arranged to introduce the gaseous sterilizing agent in a top portion of the sterilization zone (11) and to evacuate the gaseous sterilizing agent in a bottom portion of the sterilization zone (11), maintaining a flow of gaseous sterilizing agent essentially from top to bottom, Zelina ('915) discloses an alternate embodiment wherein the means (14, 10, 200, 174, 192, 110, 112, 114) for controlling the flow of gaseous sterilizing agent are arranged to introduce the gaseous sterilizing agent in a top portion of the sterilization zone (11) (via 14, 10, 200) and to evacuate the gaseous sterilizing agent in a bottom portion of the sterilization zone (11) (via 174, 192, 110, 112, 114), maintaining a flow of gaseous sterilizing agent essentially from top to bottom (see Figure 11).

Thus, it would have been well within the purview of one of ordinary skill in this art at the time of invention to provide the configuration of means for flowing the sterilizing agent shown in Figure 11 to the embodiment disclosed in Figure 8 as a known alternate configuration to supply the sterilizing agent. Only the expected results would be attained.

In addition, Foti ('247) discloses a device (10) for sterilization in production of packages (38) (see Abstract and Col. 2 lines 8-16) having an open end and a closed end (see Figure 1 and Col. 2 lines 52-54) prior to filling the packages (38), which is adapted for sterilization with a gaseous sterilizing agent (see Col. 2 lines 17-32 and 37-41), said device (10) comprising a heating zone (86), a sterilization zone (34), a venting zone (52), and means (12, 30, 42, 40, 46) for controlling a flow of gaseous sterilizing

agent in the sterilization zone (34) such that the gaseous sterilizing agent is both introduced into (via 30) and evacuated (via 42) from the sterilization zone (34) at such rate that the higher positive pressure is maintained in the sterilization zone (34) (see Figure 1 and Col. 2 lines 42-47 and 58-59), wherein the means for controlling the flow of gaseous sterilizing agent are arranged to introduce the gaseous sterilizing agent in a top portion (18 and 30) of the sterilization zone (34) (see Figure 1 and Col. 2 lines 37-39) and to evacuate the gaseous sterilizing agent in a bottom portion (42) of the sterilization zone (34) (see Figure 1 and Col. 2 lines 48-50), in order that in the sterilization zone (34) the gaseous sterilizing agent flows essentially in a direction from the open end of the packages (38) (via 18 and 30; see Figure 1 and Col. 2 lines 37-39) towards the closed end of the packages (38) (via/into 42) (see Figure 1 and Col. 2 lines 48-50) in order to return/recycle the sterilizing agent vapor/air stream from the sterilization zone (see Figure 1 and Col. 2 lines 48-51).

It would have been obvious to one of ordinary skill in this art at the time of invention to introduce the gaseous sterilizing agent from a top portion of the sterilization zone and to evacuate the gaseous sterilizing agent in a bottom portion of the sterilization zone so that a flow of sterilizing agent essentially from top to bottom is maintained in the method of Zelina as modified by Taggart in order to return the used sterilizing agent and recycle it as shown by Foti.

As to Claim 2, Zelina ('915) discloses that said zones are separated from each other by partitionings having openings for the passage of packages (see Figures 1 and 8).

As to Claim 6, Zelina ('915) discloses that the venting zone (182) comprises means (183, 184, 188) for venting away the sterilizing agent used in the sterilization zone (11) from the packages (120) after sterilization (see entire document, particularly Figure 8 and p. 6 [0064]).

As to Claims 9-10, neither Zelina ('915) nor Taggart ('435) appears to specifically teach that the device is further comprised of means for controlling a venting air flow in the venting zone, such that the venting air flows essentially in a direction from the open end of the packages towards the closed end of the packages nor that the means for controlling the flow of venting air are arranged to introduce the venting air in a top portion of the venting zone and to evacuate the venting air in a bottom portion of the venting zone, maintaining a flow of venting air essentially from top to bottom.

It was known in the art at the time of invention to provide a device for sterilization in production of packages using gaseous sterilizing agent with means for controlling a venting air flow in the venting zone, such that the venting air flows essentially in a direction from the open end of the packages towards the closed end of the packages where the means for controlling the flow of venting air are arranged to introduce the venting air in a top portion of the venting zone and to evacuate the venting air in a

bottom portion of the venting zone, maintaining a flow of venting air essentially from top to bottom.

Foti ('247) discloses that the device (10) for sterilization in production of packages using gaseous sterilizing agent is further comprised of means (48, 54) for controlling a venting air flow in the venting zone (52), such that the venting air flows essentially in a direction from the open end of the packages (38) towards the closed end of the packages (38) (see entire document, particularly Figure 1 and Col. 3 lines 12-20), wherein means (48, 54, 62, 64) for controlling the flow of venting air are arranged to introduce the venting air in a top portion (48) of the venting zone (52) and to evacuate the venting air in a bottom portion (62, 64) of the venting zone (52), maintaining a flow of venting air essentially from top to bottom (see Figure 1) in order to remove a condensate mixture from the surface of packages (see entire document, particularly Col. 3 lines 12-15).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide means for controlling a venting air flow in the venting zone, such that the venting air flows essentially in a direction from the open end of the packages towards the closed end of the packages in the device of Zelina in a known alternate configuration in order to remove the sterilizing agent from the packages as shown by Foti.

As to Claim 12, Zelina ('915) discloses that the device is further comprised of a package heating temperature sensor for sensing the temperature of the packages (120) entering the heating zone (170) (see p. 5 [0059], particularly lines 7-10).

As to Claim 13, Zelina ('915) discloses that the device is further comprised of an entry temperature sensor for sensing the temperature of the packages (120) before entering the sterilization zone (11) (see p. 5 [0059], particularly lines 7-10).

As to Claim 14, Zelina ('915) discloses that the device is further comprised of a feedback circuit (150, 154, 156) (see p. 5 [0057]-[0059] and [0061], particularly lines 7-11 of [0059]) capable of controlling the heating in the heating zone (170) based on the temperature of the packages (120).

As to Claim 15, Zelina ('915) discloses that the device is further comprised of a condensation detector (152, 153) for detecting condensation in the sterilization zone (11) (see entire document, particularly p.5 [0057]-[0061], particularly [0057] and [0059], where a dew point or humidity sensor is deemed a condensation detector).

As to Claim 16, the device of Zelina ('915) is fully capable of sterilizing itself internally when the device is operated without the packages (120).

Taggart ('435) also discloses that the device (10) is adapted to sterilize itself internally (see Col. 16 lines 16-36).

As to Claim 17, Zelina ('915) discloses that the device is comprised means (172) for heating the interior of the device (see Figure 8).

Taggart ('435) also discloses that the device is comprised of means (152 with 148, 150) for heating the interior of the device (see Figure 3).

As to Claim 18, Zelina ('915) discloses that the device is comprised of a unit (10) for production of the gaseous sterilizing agent (see Figure 8 and p. 5 [0060]).

Thus, Claims 1-3, 6, 9-10, 12-18 and 36 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Zelina ('915), Taggart ('435) and Foti ('247).

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson (5258162) in view of Zelina (20020159915), Schroeder (6328928) and Taggart (6475435), or Zelina (20020159915) in view of Taggart (5475435) and Foti (4992247), as applied to claim 1 above, and further in view of Hanley (6565802).

Andersson ('162), Zelina ('915), Schroeder ('928) and Taggart ('435) are relied upon for disclosure described in the rejection of claim 1 under 35 U.S.C. 103(a).

Zelina ('915), Taggart ('435) and Foti ('247) are relied upon for disclosure described in the rejection of claim 1 under 35 U.S.C. 103(a).

While Zelina ('915) discloses a device for sterilization with temperature sensors in the device, neither Andersson ('162), Zelina ('915), Schroeder ('928), Taggart ('435)

nor Foti ('247) appears to specifically teach that the device is further comprised of an ambient temperature sensor for sensing the ambient temperature outside the device.

It was well known in the art at the time of invention to provide a temperature sensor that is located outside a device for sterilization for sensing the ambient temperature. Hanley ('802) exemplifies a sterilization device (10) comprised of a temperature sensor (145) located outside the device (10) (see Figures 1-2) in order to measure the ambient temperature of the outside environment and to provide an indication of the air temperature being delivered to within the device so that the operation of the device will be adjusted accordingly (see entire document, particularly Col. 11 lines 2-16).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide an ambient temperature sensor outside the device of Andersson or Zelina in order to measure the ambient temperature to provide an indication of temperature of the material (such as air or articles that are in equilibrium with the ambient atmosphere) being delivered into the device so as to adjust the operating parameters accordingly for optimized operation of the device as exemplified by Hanley.

Thus, Claim 11 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Andersson ('162), Zelina ('915), Schroeder ('928), Taggart ('435) and Hanley ('802), or Zelina ('915), Taggart ('435), Foti ('247) and Hanley ('802).

Response to Arguments

12. Applicant's arguments with respect to claims 1-3, 6, 9-19 and 36 have been considered but are moot in view of the new ground(s) of rejection.

13. Applicant's arguments filed 3/07/2011 have been fully considered but they are not persuasive. Specifically, as to Applicants argument in lines 2-5 and 2nd full paragraph on p. 8 of Remarks, Examiner would disagree and indicate that the zone 166 was indicated by Taggart as a sterilization zone (see for example, Col. 9 line 45).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REGINA YOO whose telephone number is (571)272-6690. The examiner can normally be reached on Monday-Friday, 10:00 am - 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Marcheschi can be reached on 571-272-1374. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Regina Yoo/
Examiner, Art Unit 1773